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EXAMINER	
O CONNOR, BRIAN T	

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2419	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/723,583	KRAUSE ET AL.	
	Examiner	Art Unit	
	Brian O'Connor	2419	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 May 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-38 and 43* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-38 and 43* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *6/15/09; 6/22/09*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This office action is in response to applicant's amendment filed on 5/26/2009.

2. Claims 1-38 and 43 are currently pending.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-14 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meggers et al. (US 6,728,270; hereafter Meggers) in view of Heddes et al. (US 6,674,718; hereafter Heddes) and further in view of Yamaguchi et al. (US 6,674,477; hereafter Yamaguchi).

With respect to claims 1 and 43, Meggers discloses a method and apparatus for examining an incoming packet stream (AC of Figure 4) then determining if the packets are real-time packet or not (210 of Figure 5) and finally combining the split sub-streams into a single output stream (OI of Figure 4). Packets are entered into both buffers and retrieved from the end of the buffers by an output interface (OI of Figure 4; column 12, lines 1-21). Meggers's calculates a deadline for each packet that enters the system (column 13, lines 20-34).

Meggers fails to disclose determining the capacity of an output buffer scheduled to accept a packet and selecting packets for transmission based one whether the buffer has capacity or not.

Heddes, in an invention related to processing data through several pipes, discloses examining queue levels (132, 136 of Figure 7) when moving data into pipes or buffers (7, 8, 9 of Figure 1A). Heddes further disclose that the output of the examination of the queue levels is used to assign packets to positions in the queues (212, 214, 218, 224 of Figure 10).

Heddes teaches the benefit of increased efficiency while processing data through multiple queues by examining the queues levels or capacity (column 7, lines 27-30). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Heddes with the method and apparatus of Meggers.

Meggers does not disclose a deadline taken from a pre-existing synchronization time reference extracted from a packet in the group of streams.

Yamaguchi, in an invention related to transmitting multiplexed video streams (Abstract; column 10, lines 56-62; see transmitting means such as a coaxial cable, CATV) discloses a deadline (AL with Time stamp to show PTS in Figure 6b for a packet; Communication header with Time stamp to show PTS in Figure 6c for a packet; Priority at application level, Priority in IP level of Figure 32; column 14, lines 47-52; column 13, lines 60-65; where Presentation Time Stamp is a deadline) taken from a pre-existing synchronization time reference (AL with Time stamp in Figure 6b for a packet; Communication header with Time stamp in Figure 6c for a packet) extracted from a

packet in the group of streams (Bit stream of sound, Bit stream of picture, Streampriority of Figure 24) using to determine that a packet is to be transmitted before other next packet (column 17, lines 10-15; where an overload is stopped by using priority for packet streams; column 36, lines 15-20; where IPv6 priority bits are using to control packet traffic).

Yamaguchi teaches the advantage of better picture-quality and improved video syncing by using a dynamic control for video/audio streams (column 3, lines 19-26; column 3, lines 64-66). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of DeMoney with the method and apparatus of Yamaguchi.

With respect to claim 2, Meggers further discloses that packet are read from the queue and transmitted based upon a delivery deadline, and the delivery deadline is converted from a timestamp for priority control (column 11, lines 59-67).

With respect to claim 3, Meggers further discloses that every time a packet arrives (210 of Figure 5) the processing will update timestamps and delivery deadlines (column 12, lines 27-31).

With respect to claim 4, Meggers further discloses that the delivery deadline is converted from a timestamp for priority control (column 11, lines 59-67).

With respect to claim 5, Meggers further discloses that the timestamp is related to a synchronization control packet (column 11, lines 61-65) that has control parameters N and i (column 12, lines 51-65). The control parameter N is related to a

synchronisation entity (SE) of packets (column 12, lines 61-14) and the SE is viewed as equivalent to a next access unit or frame of packets.

With respect to claim 6, Meggers further discloses that real-time data is processed in sub-streams (column 9, lines 5-10) that are defined by admission control packets (column 10, lines 4-10). Meggers also teaches that a sub-stream of packets is also viewed as a synchronisation entity (SE) (column 7, lines 19-30).

With respect to claim 7, Meggers further discloses that real-time data is processed in sub-streams (column 9, lines 5-10) that are defined by admission control packets (ACPs) (column 10, lines 4-10). ACPs are sent to the network node prior to started real-time packet transmission (column 10, lines 12-23).

With respect to claim 8, Meggers further discloses that the timestamp is related to a synchronization control packet (column 11, lines 61-65) that has control parameters N and i (column 12, lines 51-65). The control parameter N is related to a synchronisation entity (SE) of packets (column 12, lines 61-14) and an SE is defined as consisting of video frames (column 6, lines 48-50).

With respect to claim 9, Meggers further discloses that the timestamp is related to a synchronization control packet (column 11, lines 61-65) that has control parameters N and i (column 12, lines 51-65). The control parameter N is related to a synchronisation entity (SE) of packets (column 12, lines 61-14) and an SE is defined as consisting of voice packets or VOIP (column 6, lines 50-55).

With respect to claim 10, Meggers further discloses that the packets are related to a synchronization control packet (column 11, lines 61-65) that has control parameters

N and i (column 12, lines 51-65). The control parameter N is related to a synchronisation entity (SE) of packets (column 12, lines 61-14) and an SE is defined as consisting of voice packets or VOIP (column 6, lines 50-55).

With respect to claim 11, Meggers further discloses that sub-streams are assigned an admission control packet (ACP) (column 10, lines 4-11) and this ACP will define control parameter T for assigning a type to the sub-stream (column 9, lines 50-55).

With respect to claim 12, Meggers further discloses that non real-time streams are send to a second queue for FIFO processing (column 11, lines 49-52; column 12, lines 32-36). FIFO processing uses order of arrival for transmitting packets and it thus represents a time spent waiting in a queue compared to other packets in the queue.

With respect to claim 13, Meggers further discloses that sub-streams are assigned an admission control packet (ACP) (column 10, lines 4-11) and this ACP will define control parameter T for assigning a type to the sub-stream (column 9, lines 50-55). And that the arrival of real-time sub-streams with ACPs is considered in the processing of non real-time streams send to a second FIFO queue (column 14, lines 2-14).

With respect to claim 14, Meggers further discloses that sub-streams are assigned an admission control packet (ACP) (column 10, lines 4-11) and this ACP will define control parameter T for assigning a type to the sub-stream (column 9, lines 50-55). The ACP will also define a control parameter D for setting a delivery deadline (column 9, lines 44-49; viewed as equivalent to a waiting time priority). And that the

arrival of real-time sub-streams with ACPs is considered in the processing of non real-time streams send to a second FIFO queue (column 14, lines 2-14).

5. Claims 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monta et al. (US 7,039,048; hereafter Monta) in view of Rabenko et al. (US 6,763,032; hereafter Rabenko).

With respect to claim 15, Monta disclose a method of combining several streams (250, 252 of Figure 2) into a group of multiplexers (10, 30, 32 of Figure 2) that includes identifying a first multiplex (Figure 2) with a first amount of data (87 of Figure 4A) in a first channel with the amount of data exceeding a first threshold (97 of Figure 4A). Then identifying a second multiplex with a second amount of data (99 of figure 4B) in a second channel with the amount of data not exceeding a second threshold (103 of Figure 4B) and selecting a subset of the group of streams being send over the first multiplex (119 of Figure 4B).

Monta fails to disclose reassigning or transferring a subset to a different multiplex.

Rabenko, in an invention for transmission between a cable modem and CMTS (Figure 3; column 4, lines 50-54; where the cable system includes video servers), discloses checking a first threshold (38 of Figure 8) and a second threshold (40 of Figure 8) then reassigning or transferring a subset of channels to a different multiplexed channel set (44, 48 of Figure 8).

Rabenko realizes the benefit of increased quality while multiplexing data through multiple channels by examining the quality levels or capacity (36, 42 of Figure 8). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Rabenko with the method of Monta.

With respect to claim 16, Monta further discloses that the first and second PID are used to notify television receivers of updates to the data-streams (82 of Figure 2).

With respect to claim 17, Monta fails to disclose thresholds used to control data loss.

Rabenko, in an invention for transmission between a cable modem and CMTS (Figure 3; column 4, lines 50-54; where the cable system includes video servers), discloses checking a first threshold (38 of Figure 8) and a second threshold (40 of Figure 8) then reassigning or transferring a subset of channels to a different multiplexed channel set (44, 48 of Figure 8).

Rabenko realizes the benefit of increased quality while multiplexing data through multiple channels by examining the quality levels or capacity (36, 42 of Figure 8). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Rabenko with the method of Monta.

With respect to claim 18, Monta further discloses a PID (82 of Figure 2).

Monta fails to disclose reassigning or transferring a subset to a different multiplex.

Rabenko, in an invention for transmission between a cable modem and CMTS (Figure 3; column 4, lines 50-54; where the cable system includes video servers),

discloses checking a first threshold (38 of Figure 8) and a second threshold (40 of Figure 8) then reassigning or transferring a subset of channels to a different multiplexed channel set (44, 48 of Figure 8).

Rabenko realizes the benefit of increased quality while multiplexing data through multiple channels by examining the quality levels or capacity (36, 42 of Figure 8). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Rabenko with the method of Monta.

With respect to claim 19, Monta further discloses that tuning of HFC carriers (column 14, lines 1-10).

With respect to claim 20, Monta fails to disclose prioritizing data-streams and choosing a stream with the highest priority relative to other data-streams and transmitting a data-stream according to the priority.

Rabenko, in an invention for transmission between a cable modem and CMTS (Figure 3; column 4, lines 50-54; where the cable system includes video servers), discloses checking a first threshold (38 of Figure 8) and a second threshold (40 of Figure 8) then reassigning or transferring a subset of channels to a different multiplexed channel set (44, 48 of Figure 8).

Rabenko further discloses using prioritizing data-streams and choosing a stream with the highest priority relative to other data-streams and transmitting a data-stream according to the priority (column 9, lines 16-32).

Rabenko realizes the benefit of increased quality while multiplexing data through multiple channels by examining the quality levels or capacity (36, 42 of Figure 8). Thus,

it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Rabenko with the method of Monta.

1. Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monta in view of Rabenko and further in view of Meggers.

With respect to claim 21, Monta fails to disclose determining a deadline for a packet that is moved from a first datastream to a second datastream.

Meggers discloses changing a deadline priority based on the difference of control parameters (column 13, lines 20-34) for all packets moved from a first queue to a second queue (column 14, lines 8-15).

Meggers teaches the benefit of a simpler control mechanism by using control packets to determine stream characteristics (column 5, lines 42-50). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Monta with the method of Meggers.

With respect to claim 22, Monta further discloses the tuning of HFC carriers (column 14, lines 1-10).

Monta fails to disclose determining a deadline for a packet moving from a first datastream to a second datastream.

Meggers discloses changing a deadline priority based on the difference of control parameters (column 13, lines 20-34) for all packets moved from a first queue to a second queue (column 14, lines 8-15).

Meggers teaches the benefit of a simpler control mechanism by using control packets to determine stream characteristics (column 5, lines 42-50). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Monta with the method of Meggers.

With respect to claim 23, Monta further discloses the tuning of HFC carriers (column 14, lines 1-10). Changing a PID in a cable system is known in the art to cause a change in RF channels.

6. Claims 24-27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Monta in view of Rabenko.

With respect to claim 24, Monta discloses a method of combining several streams (250, 252 of Figure 2) into a group of multiplexers (10, 30, 32 of Figure 2) that includes determining that there is real-time data in a subset of data in a first stream (column 13, lines 5-10; column 12, lines 60-66), classifying that data as different from a second subset of data (column 13, lines 26-38; where PID is used to classify the subset of data) and using a selected channel for transmission rather than a second channel (column 14, lines 30-38).

Monta does not disclose determining an available channel capacity of a fire channel and an available channel capacity of a second channel and in the even that the available channel capacity of the first channel is sufficient to accommodate a first subset of data selecting that first subset for transmission on the first channel.

Rabenko, in an invention for transmission between a cable modem and CMTS (Figure 3; column 4, lines 50-54; where the cable system includes video servers), discloses checking a first threshold (38 of Figure 8) and a second threshold (40 of Figure 8) then reassigning or transferring a subset of channels to a different multiplexed channel set (44, 48 of Figure 8).

Rabenko realizes the benefit of increased quality while multiplexing data through multiple channels by examining the quality levels or capacity (36, 42 of Figure 8). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Rabenko with the method of Monta.

With respect to claim 25, Monta further discloses that the first and second PIDs (82 of Figure 2) are used to notify television receivers of updates to the data-streams (56, 24, 26 of Figure 2).

With respect to claim 26, Monta further discloses using PID (82 of Figure 2) and re-tuning user's receivers (column 14, lines 36-39).

With respect to claim 27, Monta fails to disclose prioritizing data-streams and choosing a stream with the highest priority relative to other data-streams and transmitting a data-stream according to the priority.

Rabenko, in an invention for transmission between a cable modem and CMTS (Figure 3; column 4, lines 50-54; where the cable system includes video servers), discloses checking a first threshold (38 of Figure 8) and a second threshold (40 of

Figure 8) then reassigning or transferring a subset of channels to a different multiplexed channel set (44, 48 of Figure 8).

Rabenko further discloses using prioritizing data-streams and choosing a stream with the highest priority relative to other data-streams and transmitting a data-stream according to the priority (column 9, lines 16-32).

Rabenko realizes the benefit of increased quality while multiplexing data through multiple channels by examining the quality levels or capacity (36, 42 of Figure 8). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Rabenko with the method of Monta.

7. Claims 28-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monta and Rabenko and further in view of Meggers.

With respect to claim 28, Monta fails to disclose determining that a subset of the data streams includes a time indicator and creating a first priority as a function of the time indicator.

Meggers discloses that sub-streams are assigned an admission control packet (ACP) (column 10, lines 4-11) and this ACP will define control parameter T for assigning a type to the sub-stream (column 9, lines 50-55). The ACP will also define a control parameter D for setting a delivery deadline (column 9, lines 44-49; viewed as equivalent to a waiting time priority). And that the arrival of real-time sub-streams with ACPs is considered in the processing of non real-time streams send to a second FIFO queue (column 14, lines 2-14).

Meggers teaches the benefit of a simpler control mechanism by using control packets to determine stream characteristics (column 5, lines 42-50). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Monta with the method of Meggers.

With respect to claim 29, Monta fails to disclose determining that a subset of the data streams includes a time indicator and creating a first priority as a function of the time indicator.

Meggers discloses that sub-streams are assigned an admission control packet (ACP) (column 10, lines 4-11) and this ACP will define control parameter T for assigning a type to the sub-stream (column 9, lines 50-55). The ACP will also define a control parameter D for setting a delivery deadline (column 9, lines 44-49; viewed as equivalent to a waiting time priority). And that the arrival of real-time sub-streams with ACPs is considered in the processing of non real-time streams send to a second FIFO queue (column 14, lines 2-14).

Meggers teaches the benefit of a simpler control mechanism by using control packets to determine stream characteristics (column 5, lines 42-50). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Monta with the method of Meggers.

With respect to claim 30, Monta fails to disclose a time indicator or a time stamp.

Meggers further discloses that the delivery deadline is converted from a timestamp for priority control (column 11, lines 59-67).

Meggers teaches the benefit of a simpler control mechanism by using control packets to determine stream characteristics (column 5, lines 42-50). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Monta with the method of Meggers.

With respect to claim 31, Monta fails to disclose determining that a subset of the data streams includes a time indicator and creating a first priority as a function of the time indicator.

Meggers discloses that sub-streams are assigned an admission control packet (ACP) (column 10, lines 4-11) and this ACP will define control parameter T for assigning a type to the sub-stream (column 9, lines 50-55). The ACP will also define a control parameter D for setting a delivery deadline (column 9, lines 44-49; viewed as equivalent to a waiting time priority). And that the arrival of real-time sub-streams with ACPs is considered in the processing of non real-time streams send to a second FIFO queue (column 14, lines 2-14).

Meggers teaches the benefit of a simpler control mechanism by using control packets to determine stream characteristics (column 5, lines 42-50). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Monta with the method of Meggers.

With respect to claim 32, Monta fails to disclose prioritizing data-streams and choosing a stream with the highest priority relative to other data-streams and transmitting a data-stream according to the priority.

Rabenko, in an invention for transmission between a cable modem and CMTS (Figure 3; column 4, lines 50-54; where the cable system includes video servers), discloses checking a first threshold (38 of Figure 8) and a second threshold (40 of Figure 8) then reassigning or transferring a subset of channels to a different multiplexed channel set (44, 48 of Figure 8).

Rabenko further discloses using prioritizing data-streams and choosing a stream with the highest priority relative to other data-streams and transmitting a data-stream according to the priority (column 9, lines 16-32).

Rabenko realizes the benefit of increased quality while multiplexing data through multiple channels by examining the quality levels or capacity (36, 42 of Figure 8). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Rabenko with the method of Monta.

With respect to claim 33, Monta discloses detecting the subset of packets with a certain PID (82 of Figure 2).

Monta fails to disclose normalizing a parameter for identifying a second subset.

Rabenko discloses using priorities for sending subset of packets to subscribers on the CM system (column 7, lines 40-55).

Rabenko realizes the benefit of increased quality while multiplexing data through multiple channels by examining the quality levels or capacity (36, 42 of Figure 8). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Rabenko with the method of Monta.

With respect to claim 34, Monta fails to disclose a quality of service constraints as parameter for scheduling packets.

Rabenko, in an invention for transmission between a cable modem and CMTS (Figure 3; column 4, lines 50-54; where the cable system includes video servers), discloses checking a first threshold (38 of Figure 8) and a second threshold (40 of Figure 8) then reassigning or transferring a subset of channels to a different multiplexed channel set (44, 48 of Figure 8).

Rabenko further discloses using prioritizing data-streams and choosing a stream with the highest priority relative to other data-streams and transmitting a data-stream according to the priority (column 9, lines 16-32).

Rabenko realizes the benefit of increased quality while multiplexing data through multiple channels by examining the quality levels or capacity (36, 42 of Figure 8). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Rabenko with the method of Monta.

With respect to claim 35, Monta fails to disclose deciding that a group of packets from the datastream is ready for transmission.

Rabenko, in an invention for transmission between a cable modem and CMTS (Figure 3; column 4, lines 50-54; where the cable system includes video servers), discloses checking a first threshold (38 of Figure 8) and a second threshold (40 of Figure 8) then reassigning or transferring a subset of channels to a different multiplexed channel set (44, 48 of Figure 8).

Rabenko further discloses using prioritizing data-streams and choosing a stream with the highest priority relative to other data-streams and transmitting a data-stream according to the priority (column 9, lines 16-32).

Rabenko realizes the benefit of increased quality while multiplexing data through multiple channels by examining the quality levels or capacity (36, 42 of Figure 8). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Rabenko with the method of Monta.

With respect to claim 36, Monta fails to disclose prioritizing data-streams and choosing a stream with the highest priority relative to other data-streams and transmitting a data-stream according to the priority. Also Monta fails to disclose determining a buffer is not able to receive a set of data and determining a different buffer can receive a set of data.

Rabenko, in an invention for transmission between a cable modem and CMTS (Figure 3; column 4, lines 50-54; where the cable system includes video servers), discloses checking a first threshold (38 of Figure 8) and a second threshold (40 of Figure 8) then reassigning or transferring a subset of channels to a different multiplexed channel set (44, 48 of Figure 8).

Rabenko further discloses using prioritizing data-streams and choosing a stream with the highest priority relative to other data-streams and transmitting a data-stream according to the priority (column 9, lines 16-32).

Rabenko realizes the benefit of increased quality while multiplexing data through multiple channels by examining the quality levels or capacity (36, 42 of Figure 8). Thus,

it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Rabenko with the method of Monta.

With respect to claim 37, Monta further discloses that when the packets are transmitted a counter is used (105 of Figure 4B) to check a threshold of primary PID and secondary PID values (82 of Figure 2). When a change flag is detected the network node will change or reclassify the PID of the packets.

With respect to claim 38, Monta fails to disclose changing a first priority based on a modified priority difference.

Meggers discloses changing a deadline priority based on the difference of control parameters (column 13, lines 20-34).

Meggers teaches the benefit of a simpler control mechanism by using control packets to determine stream characteristics (column 5, lines 42-50). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Monta with the method of Meggers.

Response to Arguments

8. Applicant's arguments, see pg 11-16, filed 5/26/09, with respect to the rejection(s) of claim(s) 1-38, 43 under Demoney and Heddes have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Yamaguchi and Rabenko.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian O'Connor whose telephone number is (571)270-1081. The examiner can normally be reached on M-F, 9AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dang Ton can be reached on 571-272-3171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Brian T. O'Connor
September 17, 2009
Patent Examiner

/DANG T TON/
Supervisory Patent Examiner, Art Unit 2419/D. T. T./
Supervisory Patent Examiner, Art Unit 2419